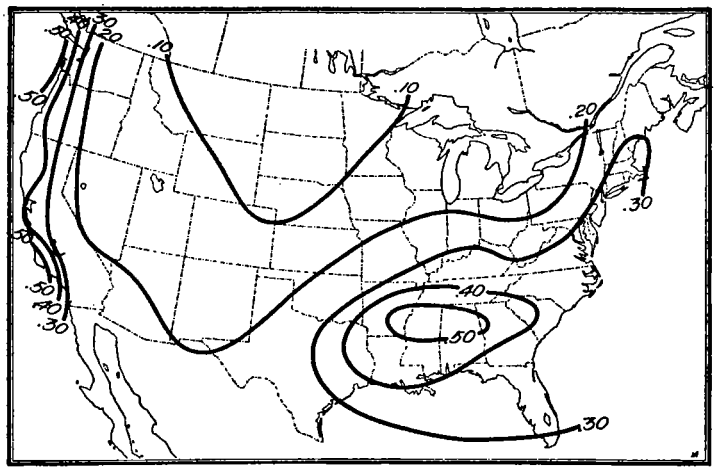

FIGURE 4.—Raininess chart of the United States—winter.

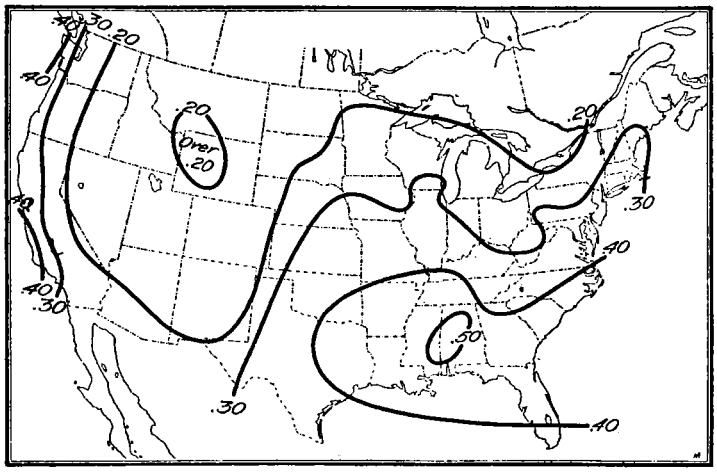

FIGURE 5.—Raininess chart of the United States—year.

The data used in charting the raininess end with the year 1903. In order to see if there has been any secular change, similar data have been taken out for five stations for the period ending with the year 1930. The results are given in the following table:

Comparative raininess

Station	To—	Winter	Spring	Summer	Autumn	Year
Boston	1903	0.32	0.32	0.34	0.37	0.34
	1930	.31	.31	.34	.36	.33
Chicago	1903	.19	.25	.35	.28	.27
	1930	.19	.25	.34	.29	.27
New Orleans	1903	.44	.55	.41	.43	.45
	1930	.46	.58	.43	.48	.47
Phoenix	1903	.25	.20	.16	.21	.20
	1930	.20	.25	.18	.24	.20
San Francisco	1903	.38	.25	.07	.31	.33
	1930	.40	.29	.06	.29	.33

THE ICE STORM OF DECEMBER 16–17, 1932, NEAR HIGHLANDS, N.C.

By L. T. PIERCE
[Weather Bureau office, Ashville, N.C.]

A glaze or ice storm of destructive severity visited several widely-separated localities in the North Carolina mountains on the night of December 16–17, 1932. Limbs and branches were stripped from forest and shade trees, and even trunks snapped off under the weight of the ice accumulations. The principal area of destruction extended from Highlands, N.C., northward along the Blue Ridge for a distance of 20 to 30 miles. Light glaze conditions prevailed over a much wider area, extending over the western half of the Carolinas, northern Georgia, eastern Tennessee, and probably into nearby States.

Apparently cold, northeast surface winds, moving nearly parallel to, but east of, the Blue Ridge were overrun by moist, warmer air from the south in which precipitation occurred in the form of rain that froze when it came into contact with the surface which previously had been cooled, by the northerly winds, to below the freezing point.

ORGANIZATION OF THE METEOROLOGICAL AND AEROLOGICAL SERVICES RELATIVE TO AVIATION IN CHILE

By JULIO BUSTOS NAVARRETE, Director
[Observatorio del Salto, Santiago, Chile, 1931]

Since 1927 aviation in Chile has relied on its own service to disseminate the meteorological and aerological information necessary to the navigation of the air.

In reality this service depends on three central observatories and numerous stations throughout the length of the land that make daily issues of weather information to the pilots.

The meteorological and aerological observatory at the aerial base Los Condores (Iquique) collects observations in the northern zone of Chile and transmits them daily, at 8 a.m. and 2 p.m., by radio to "El Bosque."

The meteorological and aerological observatory at the aerial base Maquehue (Temuco) collects observations in all of the southern zone and transmits them daily, at 8 a.m. and 2 p.m. to the station at "El Bosque."

The central meteorological office for aviation attached to the meteorological observatory at "El Bosque" collects, in its turn, all observations in the central zone.

As a result there are collected by radio at "El Bosque" at an early hour in the morning and at an early hour in the afternoon data on the state of the atmosphere throughout the country, with the observations necessary for the construction of meteorological charts relative to navigation of the air.

At each observatory records are made of atmospheric pressure, temperature, humidity, direction and force of the wind at the surface and also at different elevations, amount and classification of clouds, visibility, precipitation, and also of aerial soundings.

The instrumental equipment of the central observatories Los Condores, El Bosque, and Maquehue is very complete, including apparatus for direct reading and automatic registration. Furthermore, at El Bosque there is used for aerial soundings a Zeiss recording theodolite that traces in a diagram the direction and the velocity of the wind at different elevations.

Experiments are made with meteorographs installed on the planes of the Línea Aéria Nacional, and each pilot carries a route sheet on which are entered the meteorological conditions for each region of the country.